



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue
Seattle, WA 98101

FEB 18 2004

Reply To
Attn Of: OAQ-107

Mr. Patrick A. Takasugi, Director
Idaho State Department of Agriculture
2270 Old Penitentiary Road
P.O. Box 790
Boise, Idaho 83701

Re: Environmental Protection Agency (EPA) Assessment of 2003 Agricultural Field Burning
in Idaho

Dear Mr. Takasugi:

The purpose of this letter is to share our views on agricultural field burning in Idaho, and in particular, the crop residue disposal program managed by the Idaho State Department of Agriculture (ISDA). Our comments and recommendations are based on observations of the program during the 2003 burn season and discussions with ISDA, the Idaho Department of Environmental Quality (IDEQ), the Nez Perce Tribe, the Coeur d'Alene Tribe, as well as other interested and affected parties.

First, we'd like to acknowledge the progress that is being made in Idaho on this very important issue. Last year's legislation, House Bill 391, established a mandatory program for all of north Idaho (outside the exterior boundaries of the Indian reservations), a new penalty authority for unauthorized burning, and the establishment of fees to help financially support the program. Prior to the burn season, staff resources and training were increased, technical guidance was developed for smoke management operations, and new public notification procedures were put into place. During the burn season, new and refined tools were used to predict and monitor smoke impacts, burn decisions were better coordinated between airsheds and tribal programs, and ISDA initiated investigations into reports of illegal burning. After the burn season, ISDA promptly sponsored interagency meetings to evaluate the program and to plan improvements for the following year. These were all very positive steps showing that Idaho and ISDA are on the right track.

We would like to keep the momentum and believe additional steps are needed to further build a more effective and sustainable program that reduces impacts by improving overall performance and by addressing gaps in the program's infrastructure. Specific areas of concern covered in this letter include the development and implementation of alternatives to burning, program staffing, meteorological support and interpretation, smoke management protocols, consistent and objective burn decisions, public notification and complaint methods, readiness for the burn season, and finding common ground between stakeholders on what constitutes a smoke impact.

Alternatives to Burning

In order to meet our mutual goals of protecting both public health and important agricultural activities, we encourage the State of Idaho to further support the research, demonstration, and adoption of alternatives to burning. Promising projects are now underway and others are proposed that are in need of financial and technical support. In addition, methods could be built into Idaho's field burning registration process that would further promote and accelerate the adoption of alternatives. For example, the State of Washington requires growers to demonstrate that burning is reasonably necessary and that no practical alternative to burning is available as part of the burn permit application and approval process. A grower can demonstrate that burning is reasonably necessary by meeting criteria that are consistent with established Best Management Practices.

Program Staffing

We recognize that ISDA has increased the number of field burning staff over the last two years, especially in the most sensitive airsheds for smoke management. However, ISDA still lacks a full-time coordinator responsible for managing the program during the burn season and also throughout the important time in between when there is a need for program assessment, planning, revisions, community meetings, and training. With Idaho allowing field burning on such a large-scale (tens of thousands of acres per year), and over many months of the year, we believe it's essential that a permanent and full-time program manager position be established.

There is also a need to have all the local burn coordinators in place earlier in the year so they can receive adequate technical training and to fully learn about any new smoke management procedures and policies. All local burn coordinators should be required to take annual training, and should be restricted from making burn calls without the training.

Meteorological Support and Interpretation

While burn decisions are based on many factors, the information provided in a detailed fire-weather forecast (e.g., wind speed, wind direction, precipitation, ventilation, mixing heights, and changing conditions) is critical for predicting smoke dispersion and helping burn managers to minimize impacts. Fortunately, there are many excellent sources of weather information available. Unfortunately, the information often conflicts or is highly-technical, making burn/no-burn decisions difficult, especially for those without professional experience in meteorology.

The system Idaho has been using provides only limited access to meteorological expertise. We are concerned that relying on an out-of-state contractor as a primary source of meteorological support hinders accurate and timely forecasts and communication with burn coordinators. Forecasts were transmitted to Idaho by email and the meteorological staff rarely participated in the daily phone calls to assist burn managers with data interpretation and burn decisions. This lack of interaction and technical oversight led to inconsistent and subjective use of meteorological data. We believe a better approach would be for the State and tribes to collaboratively obtain the services of a meteorologist who would assess local and regional fire-weather conditions and work directly with the smoke managers during the burn season. This is consistent with the approach used by other major field burning burn programs in the Northwest.

Smoke Management Guidance and Burn Decisions

Last year's development of technical guidance and protocols for making burn decisions in specific airsheds was an excellent step towards an objective science-based program. The leadership and expertise provided by IDEQ for this effort was exemplary, and the contributions of staff from ISDA and the Coeur d'Alene and Nez Perce Tribes were also valuable. However, as often occurs with any new and complex undertaking, there were unanticipated gaps that at times led to confusion, inconsistent burn calls, and impacts. For example:

- The "preliminary" burn decisions made a day ahead of time often approved burning for the maximum allowable acres in an airshed. This occurred even when conditions were predicted to be marginal, "just in case" conditions improved. This approach to preserve burning options led to inaccurate burn scenarios being announced and created confusion for both the public and the growers.
- Smoke from wildfires was frequently transported into Idaho this year and complicated burn decisions. We believe there were times when ISDA should have used more caution and patience by delaying burning after extended wildfire smoke intrusions in order to protect smoke-sensitive groups from the potential health effects of cumulative exposure.
- Based on impacts seen again this year, both the smoke management procedures and the decision-making need to improve in some of Idaho's more smoke-sensitive airsheds. In particular, bluegrass residue burning on the Rathdrum Prairie once again produced high levels of particulate matter and hundreds of complaints of public health and welfare impacts over a wide area. More conservative burn decisions are needed considering the unique factors of the area (e.g., difficult terrain for smoke dispersion, a growing population, community opposition, and the history of impacts). Local smoke impacts were also a problem this year in the Grangeville area, and field burning in Boundary County led to many complaints across the border in Creston, British Columbia.

Many of these problems could be corrected by revising the procedures to include more conservative burn calls and less concentrated burning in the more sensitive areas and during periods of impaired air quality. Strong interest has been expressed by agency and tribal partners in establishing a technical workgroup that would be responsible for improving the guidance, exploring options for meteorological support, and assessing technical tools used for smoke management, such as smoke modeling and monitoring. We encourage ISDA to fully support and participate in this effort.

Public Notification

ISDA took positive steps last year to improve the timeliness and accuracy of information available to the public on burn activity. However, this was another area where actual implementation fell significantly short of expectations. For example, the ISDA website was frequently inaccessible, out-of-date, and lacked important information (such as the complaint hotline phone number). We recognize that the quality of the website did improve over the course of the year and we look forward to seeing additional improvements before the next burn season.

ISDA also provided information on burn activity through public service announcements on local radio stations. This was another step in the right direction. We understand that an interagency workgroup has been formed to improve the public notification tools. We encourage ISDA to ensure that this important work is conducted and that both the public and the growers are consulted in developing new and improved outreach methods. Since ISDA is responsible for seeking the input of communities in developing the smoke management program, the public meetings conducted as part of this process would be an excellent forum in which to ask for and gather ideas on how information on field burning activity can be provided more effectively.

Complaints

There were several significant problems with the complaint system that was in place for the 2003 burn season. First, there were numerous negative reports about the complaint hotline operators relating to their competency and willingness to provide and record accurate information. Second, the distribution of complaint information to the smoke management staff was erratic and inefficient throughout the entire burn season, making it difficult to determine the true nature and extent of smoke impacts. Third, the use of complaint information by smoke management staff was somewhat inconsistent. Some coordinators took complaints seriously and used the information as real-time feedback on how well smoke was dispersing, while others mostly dealt with complaints after burning had been completed. Finally, EPA remains concerned about the process of investigating and documenting allegations of adverse health and welfare effects from field burning. These multiple deficiencies in the complaint system call for significant attention and correction before the next burn season.

In regard to complaints about illegal burning, we understand that ISDA did initiate a number of investigations but that the results have not yet been announced. We look forward to hearing about the disposition of these cases. A credible enforcement program is critical to the success of the program.

Readiness Before and Throughout the Burn Season

The start of the smoke management program was delayed in 2003 until ISDA could make its determination of no economically viable alternatives to burning. The 2002 burn season was also delayed while pieces of the program were further developed. Additionally, some growers are missing out on chances to burn on good dispersion days throughout the year because their fields or equipment are not ready. With such a short window available for burning, it's important that both ISDA and the growers are ready for the burn season and burning opportunities. We understand that ISDA has committed to developing a detailed plan to help prepare for the 2004 burn season. We encourage ISDA to share and coordinate this plan with partner agencies, tribal programs, growers, and the public as far in advance of the burn season as possible.

We are also concerned that the later part of the 2003 burn season was poorly-managed. Burn approvals for hundreds of acres were made by the local coordinators after the meteorological support contract ended and without the full rigor of the burn team to provide a regional and consensus perspective.

Common Ground on Smoke Impacts

One of the most challenging issues in smoke management is reconciling different perspectives on the nature and degree of smoke impacts. Again this year, conflicting views were common throughout the burn season between the agencies, the agricultural community, and the general public. Reports provided to EPA from various agency and local observers on the presence and concentration of smoke plumes often didn't match. This was especially prevalent in areas where air quality monitors were not available to provide an objective means of measurement.

There were also gaps in coordination between the agricultural burn team and other land managers conducting prescribed silvicultural burning that created confusion among agencies and the public on sources of smoke. EPA encourages ISDA to work closely with all stakeholders involved in or affected by prescribed burning to help close the gap on how smoke impacts are identified, measured, and defined.

EPA recognizes that building a highly effective program takes time and resources and that Idaho has begun this process later than other areas in the Northwest. We hope these comments are useful and will assist Idaho in developing and implementing a roadmap for further progress and success. We are committed to working with ISDA and will be providing funding to assist with the 2004 season. If you have any questions, please call me at (206) 553-1234, or your staff may contact Doug Cole at (208) 378-5764.

Sincerely,



L. John Iani
Regional Administrator

cc: Ernest Stensgar, Chairman, Coeur d'Alene Tribe
Anthony Johnson, Chairman, Nez Perce Tribe
C. Stephen Allred, Administrator, Idaho Department of Environmental Quality
Michael Bogert, Counsel to the Governor
Karl Kurtz, Director, Idaho Department of Health and Welfare
Sherman Takatori, Idaho State Department of Agriculture